CHAPTER 1: INTRODUCTION

Background

California has moved into the second year of its schedule of requiring students to pass a graduation exam in mathematics and English language arts (ELA) beginning with the Class of 2004. Like nearly half of the states in the country, California began this initiative in response to widespread support for high standards and the corresponding need for some mechanism that holds students to those standards. As a component of California's testing program, the exit examination is intended to ensure that all students graduating from high school demonstrate grade level competency in reading, writing, and mathematics. The California Education Code, Chapter 8, Section 60850, specifies requirements for the California High School Exit Examination (CAHSEE)¹. Since January 2000, the California Department of Education (CDE) has worked with a development contractor, the American Institutes for Research (AIR), throughout the development and field-testing of items used in the CAHSEE and the operational tests administered to 9th graders (on a voluntary basis) in March and May of 2001.

The legislation specifying the requirements for the new exam also called for an independent evaluation of the CAHSEE. CDE awarded a contract for this evaluation to the Human Resources Research Organization (HumRRO). HumRRO's efforts focus on analyses of data from the field test of items (test questions), the field administration of the examination, and the annual administrations of the CAHSEE, and report on trends in pupil performance and retention, graduation, dropout, and college attendance rates. As specified in the legislation, the evaluation reporting will include recommendations for improving the quality, fairness, validity, and reliability of the examination.

The key question to be addressed in the evaluation is whether the benefits or positive consequences from the CAHS EE requirements outweigh the costs or negative consequences. Negative consequences are primarily associated with the likelihood that some students who might otherwise have graduated will be denied diplomas. Additionally, focus on the new requirement might have a narrowing or negative impact on the curriculum provided to students who do graduate. At this point, it is too early to provide any estimate of how many students might be affected or to gauge the impact that the new requirement will have on the curriculum in different schools.

The primary benefit that is likely to result from the new requirement is that students, with increased help from parents, teachers, and schools, will work harder to achieve essential verbal and quantitative skills. It is also too early to tell to what extent the new requirements will affect the dropout rate. If the program works as intended the number of students ultimately denied a diploma will be quite small and the increase in the number of students who reach essential minimal levels of achievement will be quite significant. Only implementation will tell whether the new testing program will achieve its intended results.

¹ As specified in the Education Code, the CAHSEE consists of two separately timed and scored sections, referred to in this report as the ELA test and the mathematics test.

Mandate for this Report

The present report is required under Section 60855 of the California Education Code. That section lists the requirements for an evaluation of California's high school exit examination and specifies dates for reporting results of the evaluation. The full text of this section is as follows:

60855(a) By January 15, 2000, the Superintendent of Public Instruction shall contract for a multiyear independent evaluation of the high school exit examination that is established pursuant to this chapter. The evaluation shall be based upon information gathered in field testing and annual administrations of the examination and shall include all of the following:

- (1) Analysis of pupil performance, broken down by grade level, gender, race or ethnicity, and subject matter of the examination, including any trends that become apparent over time
- (2) Analysis of the exit examination's effects, if any, on college attendance, pupil retention, graduation, and dropout rates, including analysis of these effects on the population subgroups described in subdivision (b).
- (3) Analysis of whether the exit examination is likely to have, or has, differential effects, whether beneficial or detrimental, on population subgroups described in subdivision (b).
 60855(b) Evaluations conducted pursuant to this section shall separately consider test results for each of the following population subgroups, provided that information concerning individuals shall not be gathered or disclosed in the process of preparing this evaluation.
 - (1) English language learners and non-English language learners.
 - (2) Individuals with exceptional needs and individuals without exceptional needs.
 - (3) Pupils that qualify for free or reduced price meals and are enrolled in schools that qualify for assistance under Title 1 of the Improving America's Schools Act of 1994 (P.L. 103-382) and pupils that do not qualify for free or reduced price meals and are not enrolled in schools that qualify for assistance under Title 1 of the Improving America's Schools Act of 1994 (P.L. 103-382).
- (4) Any group of pupils that has been determined by the independent evaluator to be differentially affected by the exit examination established pursuant to this chapter.
 60855(c) Evaluation reports shall include recommendations to improve the quality, fairness, validity, and reliability of the examination. The independent evaluator may also make recommendations for revisions in design, administration, scoring, processing, or use of the

60855(d) The independent evaluator shall report to the Governor, the Office of the Legislative Analyst, the Superintendent of Public Instruction, the State Board of Education, the Secretary for Education, and the chairs of the education policy committees in both houses of the Legislature, in accordance with the following schedule:

- (1) Preliminary report on field testing by July 1, 2000.
- (2) First annual report by February 1, 2002.
- (3) Regular biennial reports by February 1 of even-numbered years following 2002.

Summary of the Year 1 Report

examination.

Plans for conducting the evaluation have been updated each year in response to new and evolving information about plans for developing and implementing the CAHSEE (Wise, Hoffman, & Harris, 2000; Wise, Harris, Sipes, Hoffman, & Ford, 2000a; Wise, Sipes, Harris, Collins, Hoffman, & Ford (2000b); Wise, Sipes, George, Ford, & Harris, 2001). These plans are summarized briefly here to provide a context for the continuing evaluation activities.

The Year 1 evaluation activities involved reviewing and analyzing three types of information:

- 1. Review of Test Questions and Test Developer Plans and Reports. We convened a panel of teachers familiar with the California Content Standards and led them through a review of a sample of test questions. No formal reports were available during the first year; thus, we attended meetings and listened to presentations by the development contractor (AIR) and by CDE. We also monitored various presentations to the High School Exit Examination (HSEE) Standards Panel and to the State Board of Education (SBE) and had direct conversations with members of each of these groups.
- 2. Analysis of Pilot Test and Other Statewide Data. An initial source of information for our evaluation was data from the CAHSEE pilot administration. We also examined 1999 Standardized Testing and Reporting (STAR; for details see http://star.cde.ca.gov/) results with plans to monitor trends in STAR results over the course of the evaluation.
- 3. Survey of Principals and Teachers. We selected a representative sample of 24 districts and approximately 90 of their high schools to establish a longitudinal group for study. The baseline surveys, which were administered to principals and ELA and mathematics teachers, provided an initial look at schools' perspectives on the impact of CAHSEE on their programs. We also recruited teachers and curriculum experts from these schools and their districts to review test items and tell us whether the questions tested knowledge and skills not covered for all students in their current curriculum.

After completing these activities, we concluded that test development efforts to that point were highly successful. The quality of the test questions was high and development efforts were generally on track. Nonetheless, a great deal of work remained before operational administration could begin, including approval by the SBE of specific test content, development and testing of additional questions, determining the minimum passing score, determining appropriate accommodations for students with disabilities and English learners, and developing score reports. We also noted that available evidence from the field tryout and from reviews and surveys of teachers suggested that students might not be well prepared to meet the standards proposed for the assessment.

The findings suggested concerns both for whether a high quality test could be developed in the available time and, more importantly, whether students in the Class of 2004 would be adequately prepared to pass the CAHSEE. We offered the following general recommendation in our Year 1 Report:

General Recommendation. The State Board of Education, Legislature and Governor should give serious consideration to postponing full implementation of the CAHSEE requirement by 1 or 2 years.

We also provided several more specific recommendations for improving the test and its use. These included:

Specific Recommendation 1. The Department and the Board need to work together to clarify the relationships and differences among the different high school testing programs, most notably the HSEE, the standards-based STAR assessment, and the Golden State Examinations.

Specific Recommendation 2. The Department and Board should establish, expand, or accelerate processes for communicating with local districts about the HSEE and supporting their preparation for its implementation.

Specific Recommendation 3. The Department and development contractor need to gather, review, and discuss more information on the appropriateness and effectiveness of testing accommodations for special needs students and English-language learners.

Complete details of the Year 1 effort, including supplemental analyses of additional data from the field test, are presented in our primary and a supplemental reports describing evaluation activities, findings, and recommendations (Wise et al., 2000a; Wise et al., 2000b). Those two evaluation reports emphasized positive aspects of the results, as indicated by several measures of the quality of the test questions, as well as the amount of work remaining to be done before operational administration of the CAHSEE. The major apprehension noted in these reports was educators' concern that students were at that time not well prepared to pass the exam.

District Baseline Survey Resulting from Year 1 Activities

The results of the baseline survey of teachers and principals in the longitudinal sample of high schools indicated concern with the degree to which students were being provided sufficient opportunities to learn the material covered by the CAHSEE. After reviewing these concerns, the SBE and CDE requested an additional survey of all public high school and unified districts in California. Shortly after SBE adoption of the CAHSEE and its content, HumRRO developed and sent out the CAHSEE District Baseline Survey, which was required prior to October 1, 2000. The survey covered plans for changes in curriculum and other programs to help students pass the examination. We asked that each district have the survey completed by an Assistant Superintendent or Director of Curriculum and Instruction, or the individual at the district level who was most knowledgeable about CAHSEE.

The survey, which built on and benefited from the results of the longitudinal sample survey, addressed five critical topics:

- 1. Awareness of the CAHSEE, its content, administration plans, and requirements for student participation.
- 2. *Alignment* of the district's curriculum to statewide content standards, particularly those to be covered by the CAHSEE.

- 3. *Plans and Preparation* to increase opportunities for all students to learn the material covered by the CAHSEE and to help students who do not initially pass the examination.
- 4. *Expectations* for passing rates and for the effect of the CAHSEE on instruction and the status of specific programs offered in the district.
- 5. *Outcome baselines*, including retention and graduation rates and students' postgraduation plans.

The following general conclusions were drawn from results of the district survey:

- General awareness of the CAHSEE is high, but more information is needed, particularly for students and parents, about (a) the knowledge and skills covered by the CAHSEE and (b) plans for administering and reporting on the test.
- Districts report high degrees of alignment of their own content standards to the state content standards. The survey addressed this question at a general level; more work is needed to assess and document the degree to which each district's curriculum covers the content standards tested by the CAHSEE and the degree of student access to courses that offer such coverage.
- Districts have implemented or are planning a number of programs to prepare students and teachers for the CAHSEE and to assist students who do not initially pass. The most frequently planned activities include more summer school, tutoring, and matching student needs to specific courses.
- Districts believe the CAHSEE will have a positive impact on curriculum and instruction. Most expect at least half of their students to pass the CAHSEE on their first attempt.

Complete details of the district-wide survey effort are presented in a final technical report describing evaluation activities, findings, and recommendations (Sipes, Harris, Wise, & Gribben, 2001).

Key Developments Concerning the CAHSEE

A number of key events have occurred since our first legislatively mandated report. These include:

- 1. The HSEE Standards Panel recommended the content to be covered by the CAHSEE (July 2000).
- 2. The SBE adopted the examination and approved, with some modification, the content recommendations of the HSEE Standards Panel. Specifically, the Board accepted the Department's recommendation that initial coverage of algebra in the mathematics test be somewhat limited.

- 3. Regulations describing appropriate test accommodations for students with disabilities were developed and continue to evolve.
- 4. Legislation (SB 84) that would have made the 2001 administration a practice test failed two days before the March administration.
- 5. In Spring 2001, CDE issued a request for proposals (RFP) for the continued development and administration of the CAHSEE. The initial contract with AIR extended only through the development, processing, and reporting of the 2001 administration. The RFP was subsequently redrawn due to a protest and reissued in July 2001. A second protest delayed an award based on responses to the second RFP. The protest was subsequently withdrawn and an award was made to Educational Testing Services (ETS) for continued development, processing, and reporting of the CAHSEE administrations beginning with 2002.
- 6. Legislation eliminating 9th grade testing for future Classes (AB 1609) passed and was signed by the Governor (October 10, 2001). This legislation also called for a special study of "whether the test development process and the implementation of standards-based instruction meet the required standards for a test of this nature." The legislation authorizes the SBE to review the report of this study and decide, by August 2003, whether to defer the CAHSEE requirement to a later class.
- 7. A lawsuit was filed on behalf of students with disabilities to prohibit or defer the graduation test requirement (Juleus Chapman et al. v. California Department of Education et al., 2001) (see http://www.dralegal.org/cases/).

The Year 2 Evaluation Report

Our contract with the Department of Education requires an annual report at the end of each contract year. The second annual report (Wise et al., 2001), submitted June 30, 2001, covered preliminary analyses of the March 2001 administration along with other 2000/2001 contract activities. The current report replaces these preliminary analyses with complete results that include final scoring for both the March and May 2001 administrations of CAHSEE. Findings and recommendations included in our Year 2 report have been updated here to reflect the revised analyses. The current report is intended to add to the findings and recommendations in our first legislatively mandated report issued July 1, 2000. In a few instances, we will refer to technical details in the Year 2 report to reduce redundancy.

Organization and Contents of this Report of the 2001 Administration

This report covers activities performed on the independent evaluation through December 31, 2001. Chapters 2–4 report the preparation and administration of the exam itself, schools' perceptions and plans concerning the exam, and student perceptions and plans respectively. Our analyses of results from the 2001 administrations are presented in Chapter 5. The final chapter summarizes the main findings from the evaluation and presents our recommendations based on these findings.

At this time, we are able to address in detail only the first requirement under EC60855(a), analysis of pupil performance. So far, CAHSEE has been administered to 9th graders on a volunteer basis. While over 70 percent of students in the Class of 2004 took the exam as 9th graders, not all of them had completed course work that would be expected to prepare them for the exam, and we do not yet know what actions they, their parents, teachers, and schools will take in response to the results. More specific information on the potential effects of the exam will be available after the 2002 administration. At that point, all students in the Class of 2004 should have taken the exam at least once. Further, that test will provide information on how much students who did not pass the CAHSEE in 2001 were able to improve their performance